

Implantation of a shock or load absorber for mild to moderate symptomatic medial knee osteoarthritis

Information for the public

Published: 22 January 2015

www.nice.org.uk

What has NICE said?

There is not enough evidence to be sure about how well this procedure works or how safe it is. For this reason, it should only be done as part of a research study.

More research on this procedure is needed and NICE may look at it again if more evidence is published.

What does this mean for me?

Your health professional can only offer you this procedure as part of a research study. Details of your procedure will be collected.

Other comments from NICE

NICE said that the shock or load absorber is bulky and recovery after the procedure could take up to 1 year. The procedure may be a treatment option for younger patients and could delay joint replacement.

The condition

Osteoarthritis of the inner (or medial) part of the knee develops when the cartilage that covers the ends of the bones becomes worn. This can cause pain, stiffness, swelling and difficulty using the knee.

Depending on how severe the osteoarthritis is, it may be treated with medication to relieve pain and swelling. Physiotherapy and exercise can help to improve the person's ability to use their knee and to move around. Losing weight if the person is overweight or obese can also help to reduce pain. If the osteoarthritis is severe, surgery to replace part or all of the knee joint may be needed.

NICE has looked at using [implantation of a shock or load absorber for mild to moderate symptomatic medial knee osteoarthritis](#) as another treatment option.

NHS Choices (www.nhs.uk) and [NICE's information for the public about osteoarthritis](#) may be a good place to find out more.

The procedure

The aim of this procedure is to implant a device that lightens the load on the knee when the person is standing. This reduces pain and could delay the need for more complex surgery.

The patient is given a general anaesthetic. The load absorber is implanted alongside the knee joint under the skin using X-ray guidance. It is inserted through cuts made on the inside of the leg above and below the knee and fixed to the thigh bone and the shin bone. No bone or tissues are removed, which allows for further surgery later if needed. The device can be removed.

Benefits and risks

When NICE looked at the evidence, it decided that there was not enough evidence to show that this procedure works well or is safe. The study that NICE looked at involved a total of 99 patients. There were also reports about the procedure in 4 other patients.

Generally, the study showed significant improvements in patients' pain, physical function (such as walking or standing) and stiffness while carrying out everyday activities. Their knee pain became much less severe during the year after the procedure.

In the first 6 weeks after the procedure the range of movement of the knee reduced. It gradually returned to its usual range 1 year after the procedure.

All devices were implanted and started working successfully in the 99 patients.

The studies showed that the risks of the procedure included:

- the device breaking and needing removal in 1 patient
- infection of the wound in 1 patient, needing removal of the device
- pain, needing removal of the device in 4 patients. Two other patients reported pain that came back within 6 months of the procedure.

For 6 patients there was no improvement in symptoms, resulting in further surgery.

NICE was also told about some other possible risks: tissue irritation, the device pressing on surrounding bone or tissues, the device not working properly, or the device breaking and needing removal.

If you want to know more about the studies, see the [guidance](#). Ask your health professional to explain anything you don't understand.

Questions to ask your health professional

- What does the procedure involve?
- What will the research record and how long will I be in the study?

- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What care will I need after the procedure?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

About this information

NICE [interventional procedures guidance](#) advises the NHS on the safety of a procedure and how well it works.

ISBN: 978-1-4731-0967-4

Accreditation

